

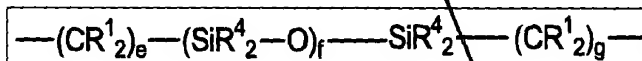
$$\left(\begin{array}{c} \text{O} \\ \parallel \\ \text{R}^1 - \text{C}_4\text{H}_3 - \text{N} - \text{Ar} - \text{Q} \\ \parallel \\ \text{O} \end{array} \right)_n$$

n is 1 to 3,

carbon atoms;

The diagram shows a chemical structure of a repeating unit of a polymer, specifically poly(phenyl acrylate). It consists of a benzene ring attached to an ester group (-O-C(=O)-). A diagonal line is drawn across the entire structure, indicating that this is a repeating unit in a polymer chain.

Q is a siloxane having the structure



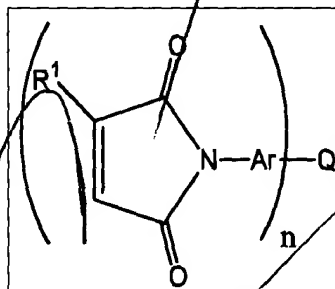
wherein:

Sub D1
cont.

the R^1 substituent independently for each position is H or alkyl having 1 to 5 carbon atoms,

the R^4 substituent independently for each position is alkyl having 1 to 5 carbon atoms or aryl, e and g are independently 1 to 10, and f is 1-50.

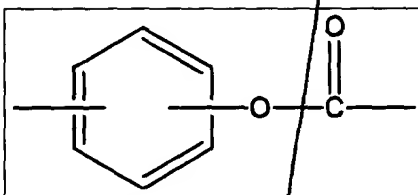
47. (New) A curable composition comprising a maleimide compound, and a curing initiator selected from the group consisting of a free-radical initiator, a photoinitiator, and a combination of those, the maleimide compound having the formula:



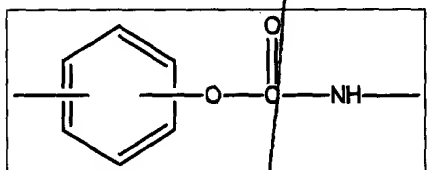
in which n is 1 to 6 and

(a) R^1 is H or an alkyl group having 1 to 5 carbon atoms;

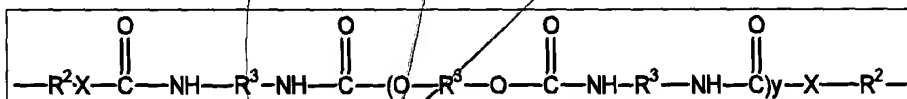
(b) Ar is an aromatic group selected from the aromatic groups having the structures:



and



(c) Q is a linear or branched chain alkyl, alkyloxy, alkyl amine, alkyl sulfide, alkylene, alkyleneoxy, alkylene amine, alkylene sulfide, aryl, aryloxy, or aryl sulfide species having up to about 100 atoms in the chain, which may contain saturated or unsaturated cyclic or heterocyclic substituents pendant from the chain or as part of the chain and in which any heteroatom present may or may not be directly attached to Ar; or Q is a urethane having the structure:



in which each R^2 independently is an alkyl, aryl, or arylalkyl group having 1 to 18 carbon atoms; R^3 is an alkyl or alkyloxy chain having up to 100 atoms in the chain, which chain may contain aryl substituents; X is O, S, N, or P; and y is 0 to 50; or